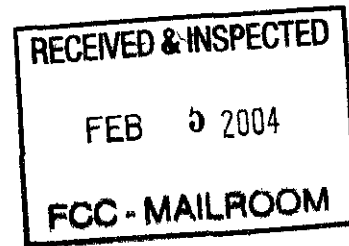


DOCKET FILE COPY ORIGINAL

Before the  
Federal Communications Commission  
Washington, D.C. 20554



In the Matter of

Review of the Commission's Rules Regarding the Pricing  
of Unbundled Network Elements and the Resale of  
Service by Incumbent Local Exchange Carriers

WC Docket No. 03-173

REPLY COMMENTS OF AT&T CORP.

David W. Carpenter  
SIDLEY AUSTIN BROWN & WOOD LLP  
10 South Dearborn Street  
Chicago, Illinois 60603  
(312) 853-7000

David L. Lawson  
David M. Levy  
C. Frederick Beckner III  
Christopher T. Shenk  
SIDLEY AUSTIN BROWN & WOOD LLP  
1501 K. St. NW  
Washington, D.C. 20005  
(202) 736-8000

Leonard J. Cali  
Lawrence J. Lafaro  
Mart Vaarsi  
AT&T Corp.  
One AT&T Way  
Bedminster, NJ 07921  
(908) 532-1850

*Counsel for AT&T Corp.*

January 30, 2004

No. of Copies rec'd \_\_\_\_\_  
List A B C D E \_\_\_\_\_

## TABLE OF CONTENTS

TABLE OF SHORT CITATIONS .....	iv
FCC AUTHORITIES.....	iv
OTHER ADMINISTRATIVE AUTHORITIES.....	vi
INTRODUCTION AND SUMMARY .....	1
<b>I. THE ALTERNATIVE COST STANDARDS PROPOSED BY THE BELLS ARE ALL VARIATIONS OF REPRODUCTION COSTS.....</b>	<b>16</b>
A. The Alternative Standards Proposed By The RBOCs Boil Down To Reproduction Cost. ....	17
B. There Is No Legitimate Basis For Any “Presumption” That The Incumbents’ Book Costs And Current Practices Are Equivalent To Long-Run Forward-Looking Costs And Practices. ....	24
C. In Any Event, Verifiable Data And Models Needed To Implement The Reproduction Cost Standard Do Not Exist. ....	29
<b>II. THE BELLS’ CONCEPTUAL CRITICISMS OF TELRIC ARE BASELESS.....</b>	<b>33</b>
A. TELRIC Is Fully Compensatory In Theory.....	33
B. TELRIC Is Fully Compensatory In Fact.....	37
C. Carrier-of-last-resort (“COLR”) Obligations Do Not Call TELRIC Into Question.....	40
D. The Assumptions Of TELRIC Are Internally Consistent.....	41
E. TELRIC Properly Reflects Relevant Geographic And Locational Constraints.....	46
F. TELRIC Is Practical To Administer.....	48
G. TELRIC Does Not Deter Efficient Investment By Incumbent Or Competitive Carriers.....	56
<b>III. THE COMMISSION SHOULD CLARIFY ITS TELRIC RULES TO ENSURE THAT UNE RATES DO NOT SUBSIDIZE NETWORK CAPABILITIES THAT THE TRIENNIAL REVIEW ORDER DENIES TO UNE PURCHASERS.....</b>	<b>60</b>
<b>IV. APPLYING THE TELRIC RULES—SPECIFIC ASSUMPTIONS AND INPUTS.....</b>	<b>63</b>
A. Network Assumptions.....	63

1.	Network Routing And Construction .....	63
2.	Line Counts .....	67
<b>B.</b>	Technology Assumptions .....	67
<b>C.</b>	Loop Cost Inputs .....	70
1.	Fill Factors .....	70
2.	Structure Sharing .....	78
3.	Structure Mix .....	82
4.	Placement Costs .....	84
<b>D.</b>	Switching Costs .....	87
<b>E.</b>	Cost of Capital .....	90
1.	The Relevant Proxy Group .....	91
2.	The Appropriate Models Of The Cost Of Equity .....	94
3.	Computing The Cost Of Debt .....	100
4.	Capital Structure .....	102
5.	Illegitimate Risk "Add-Ons." .....	102
<b>F.</b>	Depreciation .....	109
1.	The Bells Have Failed, Once Again, To Offer Any Empirical Evidence That Existing Regulatory Lives Are Too Short To Be Forward-Looking .....	109
2.	GAAP Lives Are Too Conservative To Be Included in TELRIC .....	111
<b>G.</b>	Expense Factors .....	114
1.	Embedded Expenses Cannot Serve As a Proper Basis for Determining Forward-Looking Expenses .....	115
2.	ACFs Do Not Understate Certain Types Of Expenses .....	118
<b>H.</b>	Rate Deaveraging .....	124
<b>I.</b>	Non-Recurring Charges .....	126
<b>V.</b>	TELRIC PRINCIPLES MUST APPLY TO ALL INTERCONNECTION RATES AND COLLOCATION .....	141
<b>VI.</b>	RESALE PRICING .....	143
<b>VII.</b>	IMPLEMENTATION ISSUES .....	145
<b>A.</b>	The Commission Should Issue New Competitively-Neutral Rules To Streamline State Commission Pricing Proceedings .....	145
<b>B.</b>	The Comments Confirm That The Commission Should Not Adopt A UNE Adjustment Factor .....	148
<b>C.</b>	The Commission Should Reject The True-up Proposals Advocated By The Bells .....	149

<b>D.</b>	The Commission Should Reject The Proposals That Would Require States To Ignore Commission Application Of TELRIC Principles. ....	152
CONCLUSION.....		153

**TABLE OF SHORT CITATIONS****FCC AUTHORITIES**

<i>1999 Update</i>	<i>1998 Biennial Regulatory Review-Review of Depreciation Requirements for Incumbent Local Exchange Carriers, Report and Order, 15 FCC Rcd. 242 (1999)</i>
<i>AAD Report</i>	<i>Report on Telephone Industry Depreciation, Tax and Capital/Expense Policy, Accounting and Audits Division (April 15, 1987)</i>
<i>California 271 Order</i>	<i>Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, 15 FCC Rcd. 3953 (1999)</i>
<i>Continuing Property Records Audit</i>	<i>Continuing Property Records Audit, Notice of Inquiry, 14 FCC Rcd. 7019 (1999)</i>
<i>Expanded Interconnection Order</i>	<i>Local Exchange Carriers' Rates, Terms and Conditions for Expanded Interconnection through Physical Collocation for Special Access and Switched Transport, Second Report and Order, 12 FCC Rcd. 18730 (1997)</i>
<i>Inputs Order</i>	<i>Federal-State Joint Board on Universal Service and Forward Looking Mechanism for High Cost Support for Non-Rural LECs, Tenth Report and Order, 14 FCC Rcd. 20156 (1999)</i>
<i>Local Competition Order</i>	<i>Implementation Of The Local Competition Provisions Of The Telecommunications Act Of 1996, First Report And Order, 11 FCC Rcd. 15499 (1996)</i>

<i>Minnesota 271 Order</i>	<i>Application by Qwest Communications International, Inc. for Authorization to Provide In-Region, InterLATA Services in the State of Minnesota, Memorandum Opinion and Order, 18 FCC Rcd. 13323 (2003)</i>
<i>New York 271 Order</i>	<i>Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, 15 FCC Rcd. 3953 (1999)</i>
<i>Notice</i>	<i>Review Of The Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers, Notice Of Proposed Rulemaking, WC Docket No. 03-173 (rel. September 15, 2003)</i>
<i>Pennsylvania 271 Order</i>	<i>Application of Verizon Pennsylvania Inc., et al., for Authorization to Provide In-Region, InterLATA Services in Pennsylvania, Report and Order, 16 FCC Rcd 17419 (2001)</i>
<i>Qwest 9-State 271 Order</i>	<i>Application by Qwest Communications International, Inc. for Authorization to Provide In-Region, InterLATA Services in the States of Colorado, Idaho, Iowa, Montana, Nebraska, North Dakota, Utah, Washington and Wyoming, Memorandum Opinion and Order, 17 FCC Rcd. 26303 (2002)</i>
<i>Qwest 3-State Order</i>	<i>Application by Qwest Communications International, Inc. for Authorization to Provide In-Region, InterLATA Services in the States of New Mexico, Oregon, and South Dakota, Memorandum Opinion and Order, 1 FCC Rcd. 7325 (2003)</i>
<i>Depreciation Order</i>	<i>Matter of Simplification of the Depreciation Prescription Process, Report and Order, FCC 93-452, 1993 WL 417782</i>

<i>Texas 271 Order</i>	<i>Application by SBC Communications Inc., et al Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Texas, Memorandum Opinion and Order, 15 FCC Rcd. 18354 (2000)</i>
<i>Triennial Review Order</i>	<i>Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd. 16978 (2003)</i>
<i>Universal Service Order</i>	<i>Federal-State Joint Board on Universal Service, CC Docket No. 96-45; Forward-Looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, Tenth Report and Order, 14 FCC Rcd. 20156 (1999)</i>
<i>Virginia Arbitration Order</i>	<i>Petition of WorldCom, Inc. and AT&amp;T Communications of Virginia, Inc., Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes With Verizon Virginia Inc., and for Expedited Arbitration, Memorandum Opinion and Order, 18 FCC Rcd. 17722 (2003)</i>

#### OTHER ADMINISTRATIVE AUTHORITIES

<i>Arizona UNE Order</i>	<i>In the Matter of the Investigation Into Qwest Corporation's Compliance with Certain Wholesale Pricing Requirements for Unbundled Network Elements and Resale Discounts, Phase II Opinion and Order, 2002 Ariz. PUC LEXIS 11</i>
<i>MN Generic Cost Decision</i>	<i>In the Matter of a Generic Investigation of US WEST Communications, Inc.'s Costs of Providing Interconnection and Unbundled Network Elements, OAH Docket No. 12-2500-10956-2, PUC Docket No. P-442, 5231, 3167, 466, 421/C1-96-1540 (Minnesota PUC Nov. 17, 1998)</i>

<i>MN Final Decision</i>	<i>In the Matter of the Commission's Review and Investigation of Qwest's Unbundled Network Element (UNE) Prices, Findings of Fact, Conclusions of Law and Recommendation, OAH Docket No. 12-2500-14490-2, PUC Docket No. P-421/C1-01-1375 (Minnesota PUC, August 2, 2002)</i>
<i>NH COC Decision</i>	<i>Verizon New Hampshire Investigation Into Cost Of Capital Order Establishing Cost Of Capital, Order No. 24,265, Docket No. DT 02-110 (New Hampshire PSC, January 16, 2004)</i>
<i>Pennsylvania UNE Order</i>	<i>Generic Investigation Re: Verizon Pennsylvania Inc.'s Unbundled Network Element Rates, Tentative Order, Docket No. R-00016683, (Pennsylvania PUC, October 24, 2002)</i>
<i>Utah Order</i>	<i>In the Matter of the Application of Qwest Corporation for Commission Determination of Prices for Wholesale Facilities and Services, Docket No. 00-049-105 (Utah Public Service Commission, June 6, 2002)</i>
<i>Utah Report</i>	<i>Matter of the Determination of the Cost of the Unbundled Loop of Qwest Corporation, Report and Order, Docket No. 01-049-85 (Utah Public Service Commission, May 5, 2003)</i>
<i>Utah Erratum Report</i>	<i>Matter of an Application by the Division of Public Utilities for Commission Determination of a Model and to Establish Rates for Collocation for Qwest Corporation, Erratum Report and Order, Docket No. 00-049-106 (Utah PSC December 4, 2001).</i>
<i>Wisconsin UNE Order</i>	<i>Investigation Into Ameritech Wisconsin's Unbundled Network Elements, Final Decision Docket No. 6720-TI-161 (Wisconsin PSC March 22, 2002)</i>



**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Review of the Commission's Rules Regarding the Pricing	)	WC Docket No. 03-173
of Unbundled Network Elements and the Resale of	)	
SFinervice by Incumbent Local Exchange Carriers	)	

**REPLY COMMENTS OF AT&T CORP.**

AT&T Corp. ("AT&T") respectfully submits these reply comments to the comments filed in response to Notice of Proposed Rulemaking ("*Notice*") released by the Commission on September 15, 2003, and published in the Federal Register at 68 Fed. Reg. 59,757 (Oct. 17, 2003).

**INTRODUCTION AND SUMMARY**

To read the Bells' comments in this proceeding is to enter a time warp. It is as if the evidentiary record and Commission deliberations that culminated in the *Local Competition Order*, the six years of appeals from that Order, and the Supreme Court decision rejecting the Bells' attacks on the efficient replacement cost methodology embodied in the Commission's "TELRIC" rules, had never occurred. Once again, we are back in early 1996, and the thoroughly "discredited" reproduction cost standard, *Notice* ¶ 69 n.112, is still a fit subject for discussion.

A brief history lesson is in order. In the *Local Competition* proceedings, the Bells advocated that unbundled network element ("UNE") rates be based on their "existing network design and technology that are currently in operation." *Local Competition Order* ¶ 684 & n.1689. The Commission rejected that position, finding that it was "an embedded cost methodology" that would allow the Bells to recover "inefficient" costs and the costs of "obsolete network design." *Id.* Such a standard, the Commission held, would be "pro-competitor – in this

case the incumbent LEC – rather than pro-competitive” and would deter “efficient investment decisions and competitive entry contemplated by the 1996 Act.” *Id.* ¶ 705.

The Bells appealed. As here, they contended that their “actual prudent investment” and “historical costs” are a “better gauge of real forward-looking costs” because the Bells have been operating under “price caps.” Reply Brief of Petitioners, *Verizon Commun., Inc. v. FCC*, No. 00-511, at 20 (S. Ct., July 23, 2001).

The Supreme Court disagreed. The Court noted that “[i]f leased elements were priced according to embedded costs, the incumbents could pass these inefficiencies to competitors in need of their wholesale elements, and to that extent defeat the competitive purpose of forcing efficient choices on all carriers whether incumbents or entrants. The upshot would be higher retail prices consumers would have to pay.” *Verizon Commun., Inc. v. FCC*, 535 U.S. 467, 511-12 (2002) (“*Verizon*”). The Supreme Court recognized that permitting the Bells to recover their “actual” costs, even after years of price cap regulation, would allow them to escape penalties for inefficient investment decisions and shift the costs of any inefficiencies to their competitors. *Id.*

The Bells, knowing perfectly well that the reproduction cost standard has been “discredited,” *Notice* ¶ 69 n. 112, couch it in euphemisms. They refer to it as “actual, forward-looking costs,” Weisman (Qwest) Decl. ¶ 49; “the true forward-looking costs that the ILEC is actually likely to incur,” Aron-Rogerson (SBC) Decl. at 43; and “the long run costs that the incumbent actually expects to incur going forward,” Shelanski (Verizon) Decl. ¶ 2. But the semantics cannot conceal the economic reality. The Bells’ cost standard would, with near perfect fidelity, base UNE prices strictly on the costs of reproducing the Bells’ existing networks, using their embedded architecture and embedded technology mix. By any name, these are reproduction costs.

The Commission was absolutely correct in rejecting the reproduction cost standard in 1996, and in finding it discredited in its present Notice. The forward-looking cost of the actual incumbent local exchange carrier (“ILEC”) network is not the cost of reproducing or cloning that actual network, but the cost of reproducing its *capabilities*, using the most efficient technology available today. In a competitive or contestable market, no one would pay a premium to purchase an old inefficient network over a new and efficient network of equivalent capability. Moreover, a reproduction cost methodology, because it would require an item by item analysis of the incumbent’s “actual” network, would require an exponential increase in the amount of discovery necessary from the ILEC—even if the necessary data existed (and they often do not). *See Verizon*, 535 U.S. at 522 (noting the “relative ease of calculation” of the TELRIC standard in comparison with the incumbents’ alternative standards, which “preserve home-field advantages for the incumbents”).

The Bells do not even attempt a theoretical defense of reproduction costs. Instead, they assert that the issue is moot because price cap regulation has made existing networks so efficient that their reproduction costs and forward-looking economic costs are now one and the same. But this claim is as unfounded today as it was two years ago, when the Supreme Court, at the Commission’s behest, flatly rejected it. First, an efficiently configured network for the supply of UNEs is likely to differ considerably from a network optimized to supply the entire gamut of regulated and unregulated services that the Bells now offer. *Id.* at 525-26. Second, the efficient short run mix of new and old technology for a firm with large amounts of sunk investment—the species of efficiency that price caps seek to optimize—is likely to differ significantly from the mix of assets that is optimal when all assets are valued at their current cost. Third, price cap regulation, as actually implemented, is riddled with loopholes and escape hatches that preserve a substantial link between a firm’s “actual” costs and rates. Adoption of a reproduction cost

standard would merely reinforce this linkage, and thus would have a pernicious effect on incumbent incentives. *Verizon*, 535 U.S. at 512. For all of these reasons, adopting reproduction cost ratemaking—by whatever name—would be arbitrary and capricious.

The Bells' attacks on TELRIC are also drawn from the trash bin of *Verizon*. The Bells told the Supreme Court that "TELRIC will result in constantly changing rates based on ever cheaper, more efficient technology [and that] the incumbents will be unable to write off each new piece of technology rapidly enough to anticipate an even newer gadget portending a new and lower rate." *Id.* at 518. The Supreme Court rejected that argument. First, the TELRIC standard does not require optimal efficiency. The assumption that new entrants will replicate existing wire center locations, and the time lag between rate changes, give incumbents ample margin for error. *Id.* at 505-506. Moreover, even rigorous application of the efficiency standard would do no more than replicate the performance of competitive and contestable markets, where competitive pressures ruthlessly revalue existing assets whenever newer technology arrives on the market. *Id.* at 509-12. In this regard, the Supreme Court found that Verizon simply misapprehended the role of return on capital and depreciation under TELRIC, because TELRIC expressly authorized state commissions to set forward-looking, risk adjusted depreciation lives and returns to account for technological advances and the risk of obsolescence. *Id.* at 519. As long as regulatory depreciation formulas allow recovery of economic depreciation—and the Commission's existing standards expressly do so—the incumbent carriers will have a full and fair opportunity to recover their costs. Even the Bells' economists concede this. And the Bell-sponsored "empirical" studies purportedly supporting the opposite conclusion rely on ARMIS embedded cost data, which the Bells themselves have dismissed as economically irrelevant for the purposes for which it is being used.

The supposed inconsistencies between the competitive assumptions of TELRIC and the relevant assumptions about risk, scope and scale economies, and entry costs, rest on a fundamental misunderstanding of TELRIC. TELRIC models the performance of contestable markets, not markets that necessarily contain multiple facilities-based competitors. In a contestable market, a single firm can supply the entire market, and the risks of facilities bypass are, as in actual local markets, relatively low.

The Bells' claim that appropriate geographic realism warrants adoption of a reproduction cost standard is equally wide of the mark. The issue of modeling detail goes to the choice of cost model, not the merits of TELRIC itself. Like other cost models, TELRIC models have become increasingly sophisticated in accounting for customer locations, customer services, geography and topography. There is no reason to believe that reproduction costs could be adduced with comparable precision—actual experiences in state commission proceedings (and the Commission's own audits) have proven time and again that the Bells' records are simply not detailed or accurate enough. And the Bells have not submitted here any operational "model" for computing their reproduction costs that would allay this concern—or even described such a model other than in the broadest generalities. In any event, greater precision in modeling reproduction costs is a pointless exercise, for reproduction costs are economically irrelevant.

The notion that TELRIC is impractical to administer or verify is another claim discredited by the Supreme Court. *Verizon*, 535 U.S. at 522. State-to-state variations in UNE prices are inevitable in a hybrid federal-state regulatory scheme, regardless of which cost standard the Commission adopts. The variability of UNE prices has been narrowing over time, however, as state commissions have become more experienced at applying TELRIC. The "econometric" studies offered by the Bells can claim the contrary only through a crude statistical sleight of hand. When appropriate and recognized measures of statistical linkage are used, these

very studies confirm that state UNE prices correlate strongly with variations in proxies for forward-looking costs. Likewise, the downward trend in UNE prices since 1996 reflects both the greater experience of state commissions in applying TELRIC, and the declining cost nature of the local telephone business over the same period.

In every particular, the Bells' assumption and input proposals confirm the economic bankruptcy and impracticality of their reproduction cost focus:

**Network Assumptions.** The debate over network assumptions offers further evidence of the unworkability of reproduction cost ratemaking. Although the Bells urge adoption of a "real-world" approach, this effectively concede that their data on "actual" routings, topographies and other geographic values are both inaccurate and incomplete. The Bells offer no evidence that the right-angle routing algorithm used in many CLEC cost models—or any other simplifying algorithm—causes an understatement of costs. To the contrary, empirical comparisons in Florida and elsewhere have shown that these simplifying assumptions produce conservatively high results.

The Bells do not dispute that accurate determination of loop costs requires data on line counts for all high-capacity loops, whether available as UNEs or not. The Commission should expressly require the Bells to produce such data in discovery.

**Technology Assumptions.** The Bells argue, as in the past, that a forward-looking cost model should ignore the most efficient commercially-available digital loop carrier technology for fiber-fed loops: Integrated Digital Loop Carrier using GR-303 technology. The record confirms, however, that GR-303 is both technologically feasible and cost-effective. Thus, as the Bells' own testimony confirms, the real reason for their failure to deploy this technology is their sunk investment in obsolete and inferior technology.

**Fill Factors.** The Bells' comments confirm the lack of any credible case for basing loop prices on embedded fill factors. Accommodating churn requires only modest amounts of spare capacity: most churn is essentially self-canceling; and dwindling demand for second lines has reduced the amount of churn. A forward-looking network would have little defective equipment. In any event, "breakage" that results from the limited number of discrete cable sizes offered by manufacturers may well be adequate to provide for the need for spare from churn and defective plant—and the buffer spare that may additionally be required is modest and amply provided for by the cable sizing factors incorporated in modern TELRIC models. And the cost of capacity to meet future growth in demand, whether efficiently sized or not, is not attributable to current ratepayers and should not be recovered from them. Verizon's assertion that current ratepayers should pay for "growth capacity" because "on average" utilization in the network "remains stable over the long run" is the same causation shell game that the Wireline Competition Bureau rejected in the *Virginia Arbitration Order*. Verizon confuses average utilization *in the aggregate* with the utilization of *individual* loops, the relevant focus of analysis.

The notion that the existence of competition warrants a presumption that existing fill factors are efficient is absurd. The record (and the Commission's findings in the *Triennial Review Order*) make clear that the Bells do not, and cannot as a matter of law, face effective competition for any of the network elements subject to the TELRIC pricing rule. Moreover, if competition actually increased, efficiency would require that the Bells decrease their costs per line by *increasing* their current fills, not keeping them stable and with excess capacity. And even if (contrary to fact) existing fills were efficient, the costs of the share of spare capacity acquired to meet anticipated future growth cannot properly be recovered from current ratepayers.

The Bells' claim that increasing fill factors would degrade service quality is equally unfounded. The Bells offer no empirical support for this self-serving claim, and it is

contradicted by the incumbents' own engineering guidelines. Equally unsupported is the Bells' claim that their carrier-of-last-resort obligations warrant recovery of excessive capacity costs from CLECs. The incumbents offer no evidence that state commissions somehow require them to maintain bloated levels of spare capacity. Even if the Bells were correct, however, the costs of maintaining such capacity should be recovered through universal service funds, not UNE pricing. Finally, the use of embedded fill factors would make UNE cost determination less transparent and open, not more so.

**Structure Sharing.** The Bells' position on structure sharing exemplifies their schizophrenic treatment of sunk investment. The Bells' main argument against high structure sharing percentages is that increased structure sharing makes no economic sense once other carriers have built their own networks. This argument is correct, however, only in the short run, *when investment in support structure is sunk*. In the long run—the time horizon of TELRIC—there are, and will be, plenty of opportunities for sharing buried and underground structure. If the short run is the relevant time perspective, the *unshared* portion of the Bells' investment in outside plant, which is largely sunk, is essentially zero. The Bells cannot have it both ways, endorsing a methodology that allows them to use short-run costing assumptions where they produce higher costs, and simultaneously advocating long-run cost assumptions where *they* produce higher costs. Finally, Verizon's claim that coordination costs outweigh the savings from structure sharing is unsupported. The Georgetown installation project cited by Verizon, despite its extraordinary complexity, confirms that effective coordination can be achieved at a reasonable cost.

**Structure Mix.** Outside plant mix—the relative proportions of aerial, buried and *underground cable*—further illustrate the incoherence of the Bells' arguments for embedded input assumptions. The Bells are correct that past investment decisions limit the carriers' ability



in the short run to optimize their structure mix in light of recent advances in technology. In the short run, however, most structure investment is sunk, and thus has an economic cost of zero. If the Bells want this investment valued at its long run replacement cost, consistency requires that the valuation also reflect the efficiencies available in the long run from optimizing the structure mix.

**Placement Costs.** The Bells' arguments for using embedded placement costs are equally unsupported. *The Bells do not—and cannot—dispute that advances in technology would dictate a considerably different, and less expensive, configuration of serving areas, feeder-distribution interfaces (“FDIs”), serving area interfaces (“SAls”), and remote terminals than is now embedded in existing local networks.* The Bells' only rejoinder—that forward looking models of placement costs engage in “gamesmanship” by ignoring real world cost constraints—is refuted by the record. TELRIC cost models properly account for all of the significant effects of terrain, urbanization, and other relevant factors. And Qwest's assertion that the Arizona commission endorsed a “time machine approach,” which assumed that “most of the roads in downtown Phoenix and Tucson are made of dirt,” is a palpable falsehood. The Arizona commission assumed the very opposite.

**Switching Costs.** The Bells offer no credible argument for imputing shallow (“growth”) discounts to switching capacity that an efficient carrier would buy at deeper (“new”) discounts—and which the Bells in fact bought largely at such discounts. The Bells' claim that vendors would not offer deep discounts for new equipment if the Bells used those discounts for most of their purchases ignores the fact that the Bells have done just that since the 1980s.

The Commission should reject Verizon's arguments for recovering switching costs through traffic-sensitive switching charges. Verizon does not dispute that (1) switch purchasers pay vendors per line, not per minute of use; (2) modern switches have substantial spare capacity,

and do not exhaust on usage; (3) less than 15 percent of costs relating to peak periods are traffic sensitive; (4) there is no practical way to recover those costs through a peak load rate structure; and (5) a per-port flat fee, unlike a per minute charge, is competitively neutral.

**Cost of Capital.** The cost of capital adjustments proposed by the Bells violate TELRIC principles, and would boost the cost of capital to competition-detering levels. Neither S&P 500 firms, nor CLECs and other long distance carriers form appropriate risk proxy groups. The first proxy group would overstate the cost of capital by foregoing the financial economies of scale and scope that the Bells and other local exchange carriers achieve through integration into multiple product markets and providing UNEs over the same networks that they use to provide their own retail services. Diversified industrial companies are not remotely representative of the markets, risks, or capital requirements of the local telephone business. CLECs are new entrants in markets dominated by the legacy monopoly incumbent carriers, with only tiny footholds in local markets, and thus have much higher business risks than the incumbents. And long distance carriers have been subject to intense competition for years and now face entry from the Bell monopolists that can self-supply their own access at economic cost while charging the long distance carriers above-cost access rates. And the Bells gain nothing by claiming that UNE-only companies would lack the diversification needed to achieve a cost of capital as low as the Bell holding companies' cost of capital. If integration of the UNE business with the Bells' other lines of business achieved genuine economies of scope and scale, than an efficient UNE provider would integrate with a firm providing those other services, just as the Bells have done.

Verizon and BellSouth's arguments in favor of the one-stage (perpetual growth) discounted cash flow ("DCF") methodology are economic nonsense. It is mathematically impossible for above-average growth rates to persist indefinitely, and the Bells offer no evidence that rational investors assume to the contrary. Verizon's assertion that the present value of the

cost overstatement generated by the one-stage assumption is insignificant is false, and Verizon's witness has conceded as much in recent state UNE rate proceedings. The anomalous results attributed by Verizon to multi-stage DCF models are the product of the contrived assumptions of Verizon's studies. Finally, the higher cost of equity estimates generated by the three-stage DCF model for AT&T and MCI than for Verizon are precisely what one should expect: AT&T and MCI's overall business risk is much higher than Verizon's.

Verizon's arguments against the capital asset pricing model ("CAPM") are essentially a rehash of the arguments that Verizon made without success in the Virginia Arbitration proceeding. The CAPM is a widely used model of the cost of equity, and Verizon's criticisms are unfounded. Verizon's alternative posture—that the Commission should mandate very high national values for the CAPM—is equally unsound. National input values would have to be updated continually. Moreover, the specific values proposed by Verizon are grossly excessive. Long-term debt is not a risk-free form of investment. There is no reason to believe that the Bells have *betas* above 1.0 (*i.e.*, are riskier than the market as a whole). And reliable financial forecasts now indicate that the forward-looking market risk premium is in the range of three to four percent—far below the levels indicated by Dr. Vander Weide's historical data, much of it decades old.

The cost of debt should reflect debt issues with terms appropriate for capital assets being financed. Reliance strictly on extremely long-term debt rates, as Verizon proposes, is improper. No rational lender would make loans with maturities that average significantly longer than the lives of the assets being financed.

The relevant capital structure (debt/equity ratio) is the target capital structure—*i.e.*, the debt-equity ratio that an efficient financial manager would seek to achieve over the long run. The Commission should decline to mandate use of a particular one time "current" market ratio as

proposed by Verizon. The current market ratio is a short-term “snapshot” that reflects short-term market oscillations, which can result in far more or less leverage than an efficient investor or financial manager would seek for the company over the long run.

The various additives proposed by the Bells for competitive risk, regulatory risk, lease cancellation risk, and “options” or “sunk cost” risk are equally illegitimate. To the extent that these risks actually exist, they are known and anticipated by investors, and thus compensated for by the returns that investors already demand.

**Depreciation.** Verizon’s arguments for jettisoning Commission-approved asset lives in favor of GAAP (financial) lives are merely a repackaging of claims that Verizon and the other Bells have repeatedly offered without success in both Commission and state proceedings. Verizon has provided no ground for a different outcome here. The TFI “analyses” offered by Verizon as evidence that competition and innovation are shortening asset lives are *results-driven* guesswork. TFI’s forecasts over the past decade of an imminent “avalanche” of asset replacements have been consistently wrong, and the Bells have offered no reason to believe that the latest iteration of these predictions is any more likely to come true. Verizon’s claims notwithstanding, GAAP lives still have a conservative bias, designed to protect investors, that is inappropriate in regulation for the protection of ratepayers. Verizon’s protest that the Bells have no incentive to understate depreciation lives is obviously untrue: shortening depreciation lives may reduce a carrier’s reported income in the short run, but has no effect on the carriers’ actual cash flow. Moreover, shorter depreciation lives, by justifying higher annual depreciation charges and thereby higher UNE prices, create an effective deterrent to competitive entry. Finally, even the Bells do not believe *their own claims* about the appropriateness of GAAP: in recent years, they have supplemented their quarterly earnings reports with so-called “non-GAAP

reconciliations”—in plain English, admissions that the diminution of asset values implied by the companies’ financial asset lives is unrealistically rapid.

**Expense Factors.** The Bells’ comments confirm that the incumbents’ embedded expenses cannot serve as valid measures of forward-looking expenses, but must be reduced by a cost factor. The Bells claim that changes in their expenses do not correlate with changes in their investment levels is empirically false; and the claim that future declines in expenses are unlikely is refuted by recent trends in the telephone industry, and by the performance of every regulated network industry that has made the transition from monopoly. Qwest’s “proof” that CLEC cost studies and state commissions have allowed recovery of only a “small fraction” of embedded expenses would be meaningless even if Qwest’s embedded expense data had any economic significance: Qwest has compared the forward-looking expenses of supplying particular UNEs with the embedded costs of Qwest’s retail and wholesale operations *combined*. Finally, the Commission should decline the invitations of Qwest and SBC to prescribe specific methodologies for calculating GSA expenses, product management and sales, and the shared cost allocator. Qwest and SBC are seeking here to relitigate methodologies that have largely failed to win acceptance among state commissions. The proposed methodologies are illegitimate, and the state commissions properly rejected them.

**Rate Deaveraging.** Failure to deaverage rates by population density discourages efficient facility investment, encourages inefficient arbitrage, and deprives many consumers of any opportunity for competitive choice. To defer rate deaveraging until states have finished rebalancing the incumbent’s *retail* rate rates, as BellSouth proposes, would hold the competitive goals of the Telecommunications Act of 1996 (“Act” or “1996 Act”) hostage to state policies of maintaining uneconomic implicit rate subsidies.

**Non-Recurring Charges.** The Bells' proposals for non-recurring charges ("NRCs") violate the most basic principles of forward-looking economic cost-based pricing. The Bells' arguments for basing rates on the incumbents' "actual" costs are as unfounded for NRCs as for recurring rates. The Bells have every incentive to be *inefficient* in performing non-recurring activities for CLECs, and the record makes clear that the Bells have lived down to those incentives.

The Bells' proposal to allow recovering the cost of *any* one-time activity "up front" from the CLEC that first ordered the activity is another attempt to foreclose competition. The benefits from a reusable asset are enjoyed by all future users of the asset, and therefore should be recovered through recurring charges. Allowing the Bells to recover these costs through NRCs from the first user would create double recovery and barriers to entry. In this regard, the bogeyman of nonrecovery is completely unsupported. The Bells have offered no evidence that they have actually experienced such problems since 1996, even for non-recurring costs that state commissions have required the Bells to collect through recurring charges.

The Bells' attempt to collect disconnect charges at the time of initial connection is equally unjustified. Deferring the collection of disconnect charges until disconnection actually occurs does not shift "risk"; unless the facilities are actually disconnected (and they usually are not), there is in reality no "risk" to shift. The vast majority of UNE orders, including the orders (if any) that trigger an actual act of facilities disconnection, are placed by repeat players that pose no serious uncollectibles risk, and the Bells already recover any residual uncollectibles risk directly through an allowance included in UNE cost models and UNE prices.

ILECs should not be permitted to recover any costs associated with loop conditioning from CLECs, because such recovery is flatly inconsistent with forward-looking cost principles. If the incumbents had eliminated their load coils, excessive bridge taps and repeaters—as the

Bells' own industry guidelines have dictated for decades and current recurring TELRIC rates pay for—no loop conditioning would be necessary.

**Rules for Discovery.** The Bells' comments confirm the urgent need for the Commission to take action to mitigate the information asymmetry suffered by CLECs in UNE pricing litigation, and to reduce the ability of ILECs to stonewall against CLEC discovery requests. The Bells' proposals to limit the extent of discovery, and to allow it to begin only *after* cost studies have been filed, make clear what CLECs and state commissions are up against. And requiring CLECs to file cost data about their operations would be little more than a license for harassment. The divergent product mix, scale, market share and competitive position should make obvious that competitors' cost data have little or no relevance to the forward-looking costs of an efficient UNE provider. If there are exceptions, state commissions are fully capable of identifying them in particular cases.

**Automatic Rate Indexing.** The Commission should not require automatic adjustments to UNE rates over time in lieu of UNE pricing cases at appropriate intervals. Experience teaches that the productivity offsets built into automatic adjustment mechanisms almost always understate actual productivity gains. Moreover, determining appropriate adjustments would be enormously complex and burdensome. Significantly, even SBC opposes an indexing mechanism.

**True-Up Mechanism.** The Commission should decline to adopt a true-up mechanism for rate changes that may result from any order it issues here. As Verizon admits, a mandated true-up mechanism would create lingering uncertainty, possibly for many years, about the actual costs of competitive entry. For potential entrants, this lingering uncertainty would be a major barrier to entry and a major deterrent to investment.

**I. THE ALTERNATIVE COST STANDARDS PROPOSED BY THE BELLS ARE ALL VARIATIONS OF REPRODUCTION COSTS.**

Adopting the Bells' "discredited" standard of reproduction costs would lead to almost certain reversal by the courts. Allowing the Bells to recover "costs based on their existing operations . . . that reflect inefficient or obsolete network design and technology" is just as competition foreclosing today as it was in 1996, when the Commission issued its *Local Competition Order*, and in 2002, when the Supreme Court affirmed that order and rejected the Bells' arguments that their existing costs were efficient because of "price cap" regulation.

The Bells advance no serious arguments to the contrary. First, they claim that incumbent networks must be presumed—even conclusively—to be efficient because of "price cap" regulation. But the advent of price cap regulation occurred long before the *Local Competition Order* and the Supreme Court's *Verizon* decision. The Bells have offered no reason to believe that price cap regulation has become dramatically more effective since 1996, let alone 2002. Certainly, there can be no tenable claim that the incumbent networks have suddenly achieved a level of efficiency that they claimed to be unattainable only a few years ago. And, as the Supreme Court recognized, whatever the salutary effects of price cap regulation, allowing the Bells to recover their "actual" costs in UNE rates would reverse the benefits of price cap regulation because the Bells would now be able to recover inefficient, embedded costs from their competitors. Again, nothing has changed in the past two years that calls that holding into question.

Ultimately, the Bells' reproduction cost position is demolished by their own economists. These experts admit that the Bells upgrade only a small fraction of their networks in any year, and have *not* been able to achieve the level of efficiency characterized by firms operating in effectively competitive or contestable markets. Moreover, the Bells' experts concede that, once an incumbent has deployed a long-lived asset, the sunk character of the investment in the asset